

Application No. 10/549,866
Paper Dated September 15, 2008
In Reply to USPTO Correspondence of June 13, 2008
Attorney Docket No. 3135-052842

REMARKS

Applicant respectfully requests a reconsideration of the rejection of the claims. This Amendment amends independent claim 11 to include further distinctions not found in the art. A total of 10 claims remain in the case.

The Claimed Invention

The claimed invention, particularly that of claim 11, recites a heating assembly having a carrier with a heating surface, a heating element arranged on the carrier opposite to the heating surface, and a substantially form-retaining support member engaging on the carrier on the side opposite the heating surface. The heating element includes an electrical resistor track. The carrier is flexible and is adapted to be easily deformed relative to the support member. The support member is sufficiently rigid to absorb a load without substantial deformation of the carrier. Support for these limitations to claim 11 are found in several instances throughout the specification of the application and in Figs. 1 through 4 of the application.

As taught in the specification, the strength of the heating assembly of the invention is substantially derived from the support member. An advantage is that the carrier can be thinner than that of the prior art. The advantages of a thinner carrier are: 1) The response time of the heating assembly is shortened as a thinner carrier means a smaller heat capacity of the carrier; 2) A thinner carrier with attached track-like electrical resistor results in a reduced tension in the carrier; and 3) A thinner carrier can be more easily deformable than a thicker carrier which makes it possible to give the carrier more complex forms with relatively limited effort.

Claim Rejections under 35 U.S.C. §102(b)

Claims 11-13 and 16-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Loktev et al. U.S. Patent No. 6,353,707 (hereinafter “Loktev”).

Applicant submits that independent claim 11 is not anticipated by Loktev, particularly the heating device of Figs. 3, 7, 8, 9, and 11 of Loktev. The Examiner equates the base 23 (Fig. 3) or 73 (Fig. 11) of Loktev which may be rigid or flexible with the flexible plate carrier 1, 6-7, 11, and 14 of the claimed invention. The Examiner equates the insulating layer 75 (Fig. 11) of Loktev with the rigid support member 4, 10, 13, and 17 of the claimed

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invention. Loktev does not disclose two of the most important features of the claimed invention of claim 11 which are: 1) a flexible carrier adapted to be easily deformed relative to the support member; and 2) a support member which is sufficiently rigid to absorb a load without substantial deformation of the carrier.

In Loktev, particularly with regard to Fig 11, a metal casing 76 is firmly attached to the second insulation layer 75 and side edges of the rigid base 73 and serves to provide structural reinforcement for the assembly (column 8, line 65 to column 9, line 1). A similar structure exists for the embodiments of Figs. 7, 8, and 9 of Loktev.

Applicant submits that the specific combination of technical features recited in claim 11 is not disclosed in Loktev, and therefore claim 11 is patentable in view of Loktev. Claims 12-13, and 16-20 are believed to be patentable in view of their dependency on a patentable claim 11.

Claims 11-14, and 16-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Sakai et al. U.S. Patent No. 4,574,186 (hereinafter “Sakai”).

The Examiner’s position is that this reference shows a heating assembly with a plate carrier made of plastics which inherently possesses some flexible characteristics, the carrier having raised and lowered parts, a thick-film resistor track, a plate support member of an insulating material, an insulator layer provided to the carrier layer, and the support member engaging with the carrier layer.

Applicant submits that claim 11 is not disclosed in Sakai. In claim 11, the carrier is flexible while the support member is substantially form-retaining or rigid. Claim 11 now recites that the carrier is flexible and adapted to be easily deformed relative to the support member, and that the support member is sufficiently rigid to absorb a load without substantial deformation of the carrier.

It is the Applicant’s position that the specific combination of technical features recited in claim 11 is not disclosed in Sakai and therefore claim 11 is patentable over Sakai. Claims 12-14, and 16-20 are believed to be patentable in view of their dependency on a patentable claim 11.

Claim Rejections under 35 U.S.C. §103(a)

Claims 11-20 stand rejected under 35 U.S.C. §103(a) as being obvious in view of Burdon et al. U.S. Patent No. 6,572,830 (hereinafter “Burdon”). It is the Examiner’s

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position that Burdon shows the heating assembly claimed including a plate-like carrier formed by two carrier parts placed against each other defining a passage for a medium for heating, a heating element formed in a thick-film track-like resistor and arranged on the carrier layer, and a support member for engaging on the carrier layer. The Examiner further states that this reference does not explicitly show that the carrier layer is flexible, and while Burdon does not show that the carrier is flexible, this reference shows that it is known that a plastic material is used for the carrier and since a ceramic material can be flexible to a certain extent, it would have been obvious to one of ordinary skill in the art to provide a carrier made of any suitable material, including flexible material, as long as a suitable protection can be provided for the heated medium.

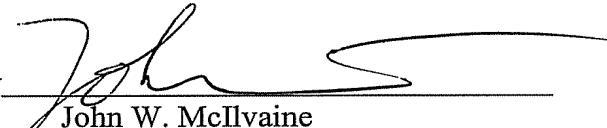
Applicant submits that the claimed invention, particularly that of claim 11 is not obvious in view of Burdon for the reasons set forth in the previous Amendment and for the reason that the distinctions now recited in claim 11 are not disclosed, taught, or suggested in Burdon. Thus, claim 11 is patentable. Claims 12- 20 are believed to be patentable in view of their dependency on a patentable claim 11.

Conclusion

In view of the above amendments and comments, Applicant submits that Claims 11-20 are patentable over the cited references. Reconsideration and allowance of the claims in their amended form are respectfully requested.

Respectfully submitted,
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